



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,205	02/01/2002	Kyeong Bae Park	0630-1423P	7510

2292 7590 05/26/2004  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
----------

NGUYEN, TRAN N

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

10/060,205

Applicant(s)

PARK, KYEONG BAE

Examiner

Tran N. Nguyen

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-21 is/are pending in the application.
- 4a) Of the above claim(s) 9-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 19 is/are allowed.
- 6) ☒ Claim(s) 4-8, 14-18 and 20 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED OFFICE ACTION

### Election Requirement

*The applicant's election, with traverse, of claims 4-8, filed on 09/11/03, is acknowledged.*  
**The traverse reasons provided by the applicant are not persuasive, as addressed in the previous Office Action. The species restriction is proper, and the election/restriction is made FINAL, as of 9/11/03, per applicant's election of claims 4-8 for prosecution on the merit.**

**Therefore, the amendments of the previously withdrawn claims 9-13 are not entered. Therefore, claims 9-13 are considered to remain being withdrawn.**

Upon the allowance of a generic claim 4, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. 1.141. *If claims are added after the election, applicants must indicate which are readable upon the elected species. M.P.E.P. 809.02.*

### Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown:

***(1) the first direction that is different from the second direction, and***

***(2) the second direction that perpendicular to the curved side surface***

or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

1. **Claims 4-8, 20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**In claim 4**, “*the adjacent lamination sheets are respectively moved to the side direction relatively whereby the laminated body is formed with a curved surface portion*” is indefinite because of the following:

(a) the term “*the side direction*” lacks antecedent basis. Also, is indefinite because it is unclear what is the so-called “side surface” of the laminated body. Is it radial inner side direction or radial outer side direction or circumferential side direction?

In light of the spec, the “curved side surface” is understood as disclosed by the prior-art fig 3 and prior-art description section of the spec.

(b) the term “*whereby*” is indefinite because It has been hold that the functional whereby” statement does not define any structure and accordingly cannot serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957).

**In claim 6**, “*a bending coupling portion located between the two moving space holes and which will be bent when a caulking*” is indefinite because the phrase seems to be incomplete recitation. Also, it is unclear the term “which” referring to the “bending coupling portion” or the “two moving space holes”.

The terms “that” “it” or “its” does not clearly reference for the intended referential subject matter or established-antecedent-basis subject matter. The applicant is requested to replace these term with established-antecedent-basis subject matter.

**In claim 18**, “*the second direction is relatively perpendicular to the curved side surface portion*” is indefinite. Claim 18 depends from claim 17, while claim 17 recites that the second direction forms a curved side surface, how can the direction that forms the curved side surface, i.e., the direction should be in parallel or in the same plane with the surface, could be perpendicular to the side surface?

In claims 7 and 20, "a side movement direction" is indefinite because it is unclear what is the so-called "side movement direction", i.e., the "side direction" with respect to what reference point?

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 4-5, 8, and 14-18**, as understood in light of the spec, are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art figs 1-3, hereafter **APA figs 1-3**, in view of **Kloster et al (US 5142178)**.

**APA figs 1-3**, and detailed discussion of **APA figs 1-3** under the Description of the Background Art, para [0010], particularly discussed about the prior-art laminated core having "inner circumferential surfaces of the plurality of unit lamination cores 11 coupled to the bobbin 50 in radial direction form a circle having a predetermined curvature so as to correspond to outer circumferential surface of the bobbin 50, and an outer side surface of the lamination cores 11 forms a curved surface corresponding to the curvature of the inner circumferential surface."

**APA figs 1-3** substantially discloses the claimed invention, except for the laminated sheets are fixedly coupled together by coupling means as recited in the claimed invention.

**Kloster** discloses (figs 1-2) a core lamination structure of a motor comprising a laminated body is formed by laminating a plurality of lamination sheets (2) of thin plate having predetermined shape, and the respective lamination sheets are fixedly coupled by coupling means (8-9) are formed on the respective lamination sheets for constructing the laminated body so as the lamination sheets to be connected in a row with respective adjacent sheet and the

coupling means having a caulking segment (8) and a complimentary opening (9) of a slightly larger dimension size. The caulking segments (8) being configured to enable a slight movement of adjacent laminations, with the coupling means, when the caulking segments (8) and compatible openings (9) of the laminations are in caulking relation in a stacked lamination assembly. The lamination sheets with the respective coupling means having a caulking segments (8) and a complimentary opening (9). These caulking segments (8) are protruded to be engaged with each other, via openings (9), on the respective lamination sheets constructing the laminated body so as to move relatively with the adjacent lamination sheets, and to fixedly couple the laminated body by the engaging of the coupling portion on the respective lamination sheets, the coupling means formed on the respective lamination sheets are fixedly coupled by caulking successively and sequentially.

Particularly, the Kloster coupling means, i.e., caulking means, is configured with the caulking segment (8) and a complimentary opening (9) of a slightly larger dimension size. This would enable the laminated sheets to be moved to first direction, i.e., the clockwise side direction and be caulked; also, the coupling means features enable the laminated sheets to be moved to second side direction, i.e., the counter-clockwise side direction and be caulked. Furthermore, because the APA figs 1-3 core is circumferentially laminated, the second direction should be perpendicular to the curved side surface thereof.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the APA figs 1-3 laminated core by providing coupling means, as taught by **Kloster**. Doing so would provide mechanical securing means to stack the laminated sheets together without any additional separately employed fastening means to abut the laminated sheets.

#### ***Response to Arguments***

Applicant's arguments filed 5/04/04 have been fully considered but they are not persuasive because of the following:

---

The applicant argues that the **Kloster's** coupling means (8, 9) are not "fixedly coupled" because the recesses (9) are sized larger than projections (8) to avoid frictional engagement, so they are in nesting relation, not "fixedly coupled" as in the claimed invention.

In response to this argument, the phrase "laminated sheets are fixedly couple" is broadly understood as laminated sheets are joined or connect in a stationary position. Kloster's coupling means (8, 9) does enable the laminated sheets to be connect in a stationary position, whether Kloster's coupling means or even the claimed invention coupling means would enable laminated sheets to be snugly fit or fictionally attached is irrelevant because the claimed language does not recite this features as argumentatively pointed out by the applicant. *During patent examination, the pending claims must be "given" >their< broadest reasonable interpretation consistent with the specification.*" > *In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).* < *Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).*

#### ***Allowable Subject Matter***

**Claims 6-7, and 20** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

---

**Claim 19** is allowed.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is (571) 272-2030.

The examiner can normally be reached on M-F 7:00AM-4:00PM.

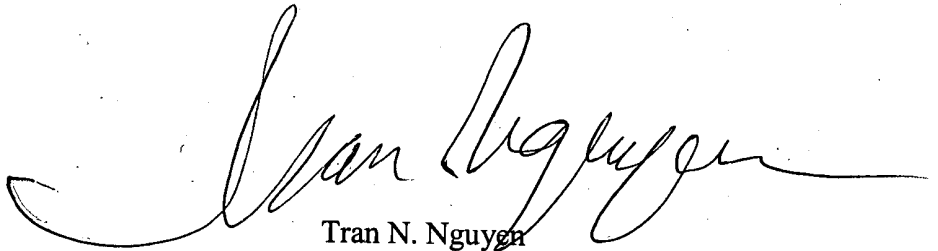
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

---



Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tran N. Nguyen', with a long horizontal flourish extending to the right.

Tran N. Nguyen  
Primary Examiner  
Art Unit 2834